

WE CLAIM:

1. A composition for delivering a biologically active compound to a mammalian cell comprising: a membrane active polymer-biologically active compound conjugate wherein the polymer has molecular weight greater than 10,000 daltons and is linked to the biologically active compound via a labile covalent bond.
2. The composition of claim 1 wherein the biologically active compound comprises a polynucleotide.
3. The composition of claim 2 wherein the polynucleotides consists of an oligonucleotide.
4. The composition of claim 3 wherein the polynucleotide is selected from the group consisting of: dsRNA, siRNA, microRNA, siRNA expression cassette, antisense oligonucleotide and ribozyme.
5. The composition of claim 1 wherein 2 or more polynucleotides are covalently linked to the polymer.
6. The composition of claim 1 wherein the polymer consists of a polyvinyl ether.
7. The composition of claim 1 wherein the polymer consists of an amphipathic polymer.
8. The composition of claim 1 wherein the polymer consists of a polyamine.
9. The composition of claim 8 wherein amines on the polymer are reversibly modified.
10. A composition for delivering a biologically active compound to a cell comprising: a membrane active polyamine-biologically active compound conjugate wherein the polymer is linked to the biologically active compound via a labile covalent bond and the amines on the polymer are reversibly modified.
11. The composition of claim 10 wherein the biologically active compound comprises a polynucleotide.
12. The composition of claim 11 wherein the polynucleotides consists of an oligonucleotide.
13. The composition of claim 12 wherein the polynucleotide is selected from the group consisting of: dsRNA, siRNA, microRNA, siRNA expression cassette, antisense oligonucleotide and ribozyme.
14. The composition of claim 10 wherein 2 or more polynucleotides are covalently linked to the polyamine.
15. The composition of claim 10 wherein the polyamine consists of an amphipathic polymer.

16. The composition of claim 10 wherein the polyamine consists of a polyvinyl ether.
17. The composition of claim 10 wherein the polyamine consists of a peptide.
18. The composition of claim 17 wherein the peptide comprises pardaxin.
19. A method for delivering a biologically active compound to a cell comprising: forming a membrane active polyamine-biologically active compound conjugate, reversibly modifying amines on the polymer and contacting the cell with the conjugate.
20. The method of claim 19 wherein the biologically active compound comprises a polynucleotide.